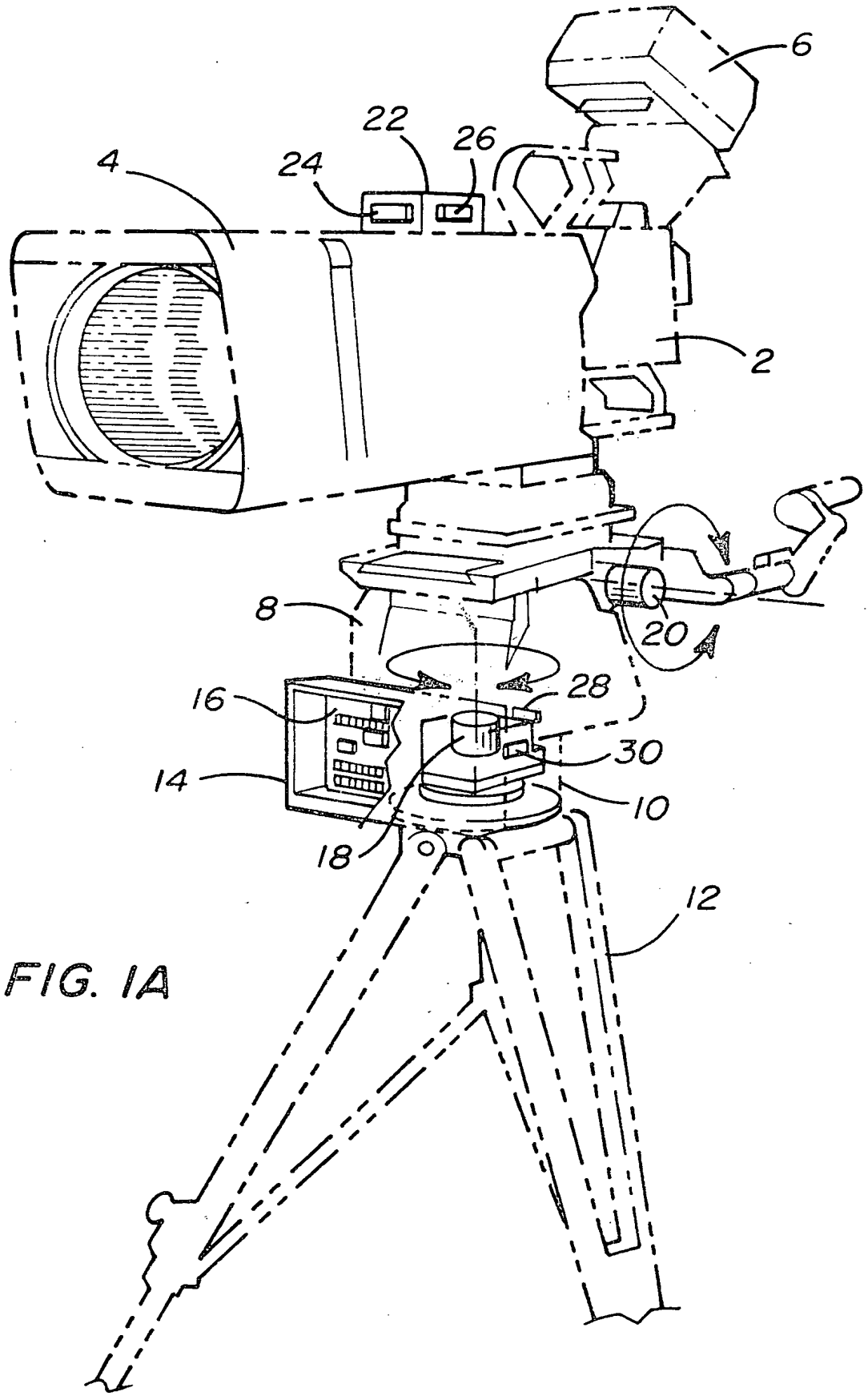


FIG. 1A

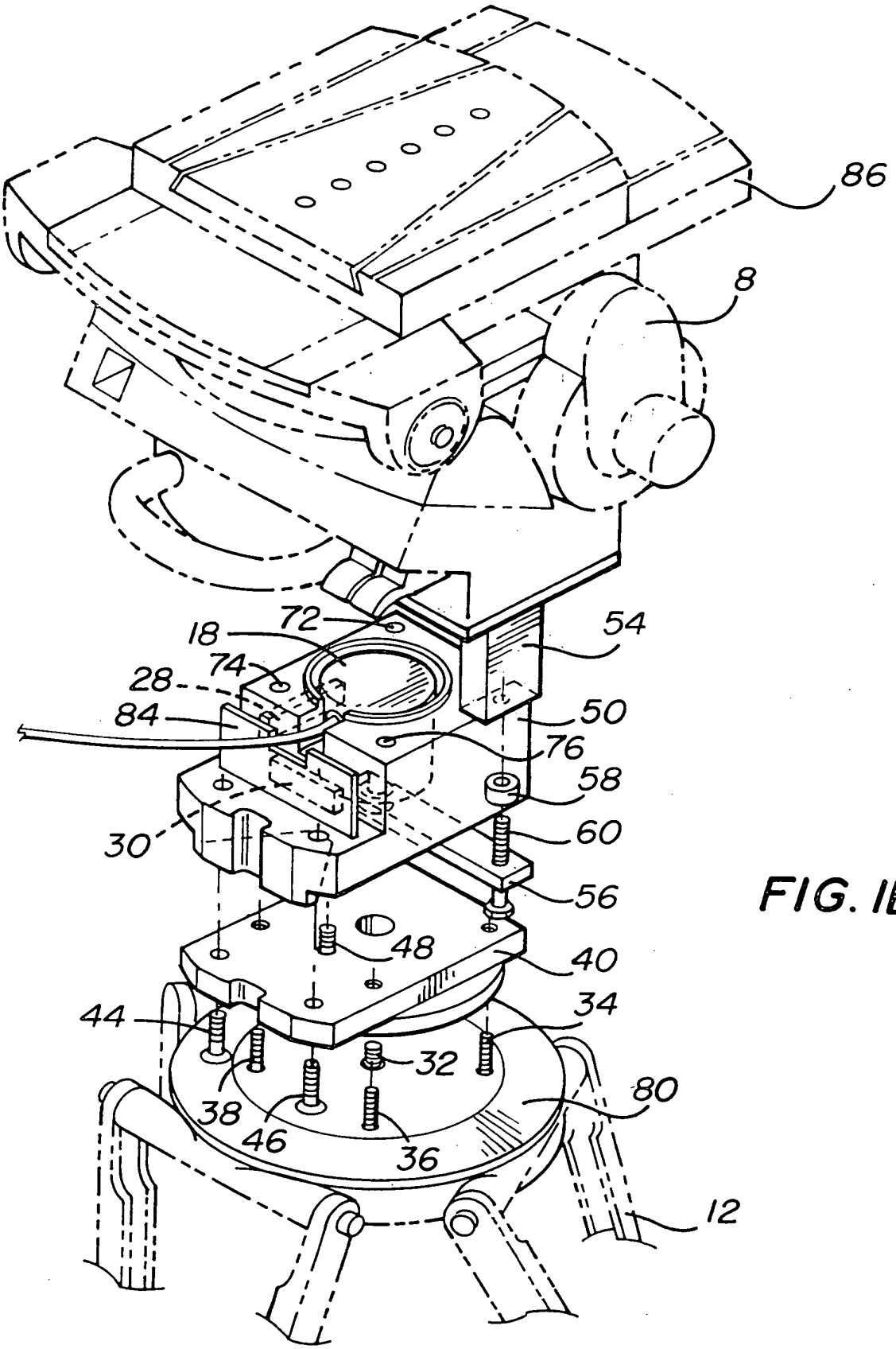


FIG. 1B

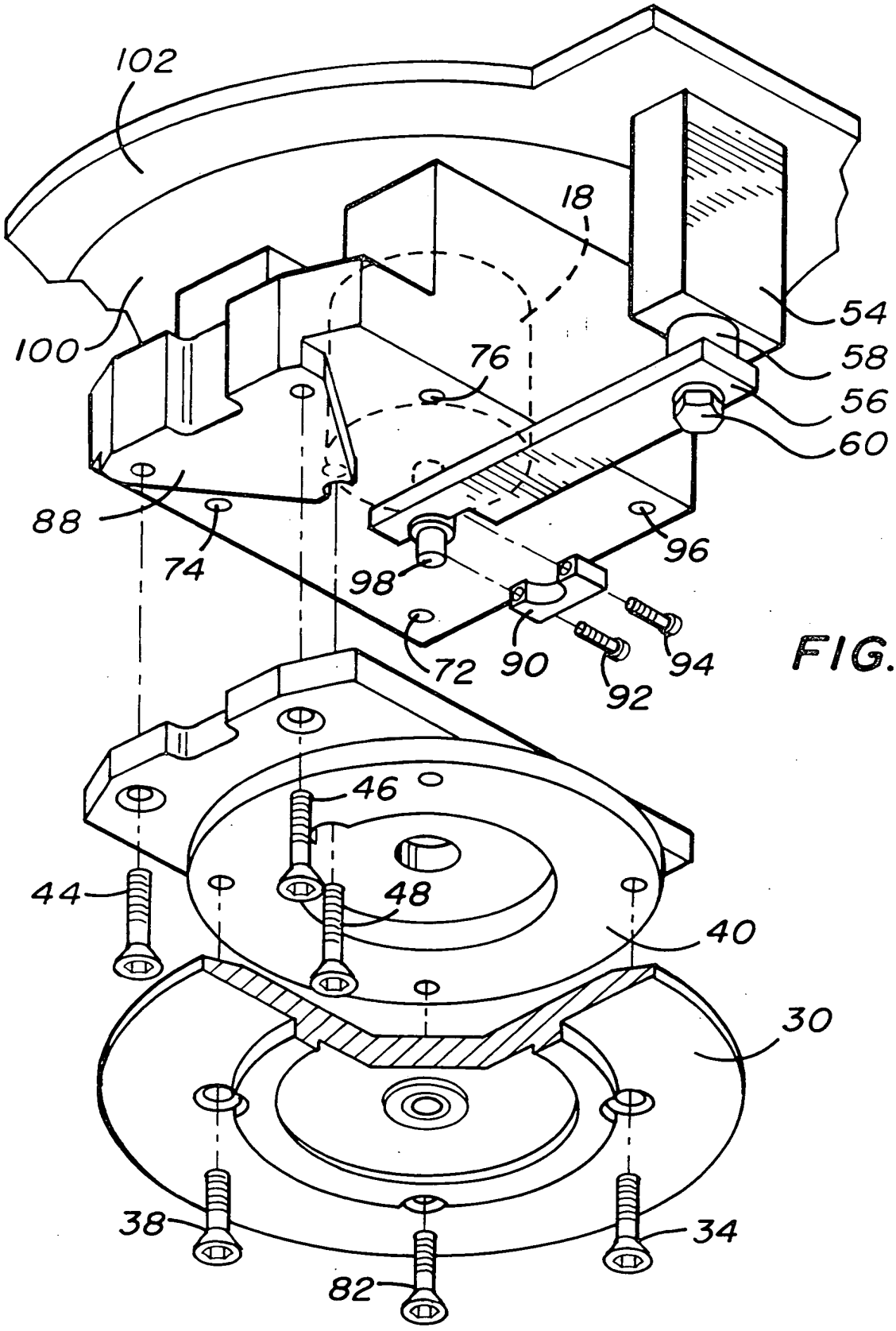

102
18
100
54
58
56
60
76
88
74
98
96
72
90
92
94
46
44
48
40
30
38
34
82

FIG. IC

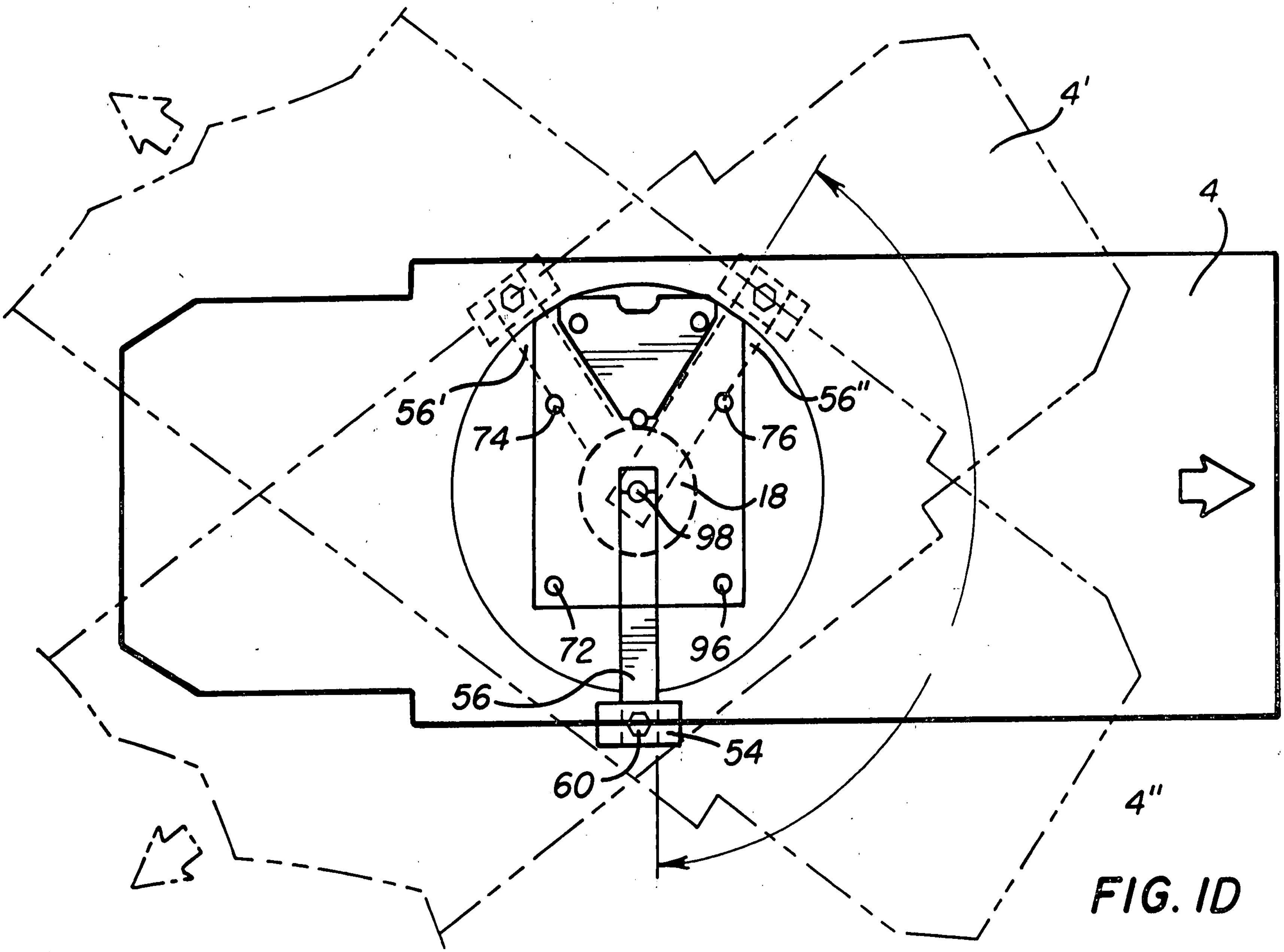


FIG. 1D

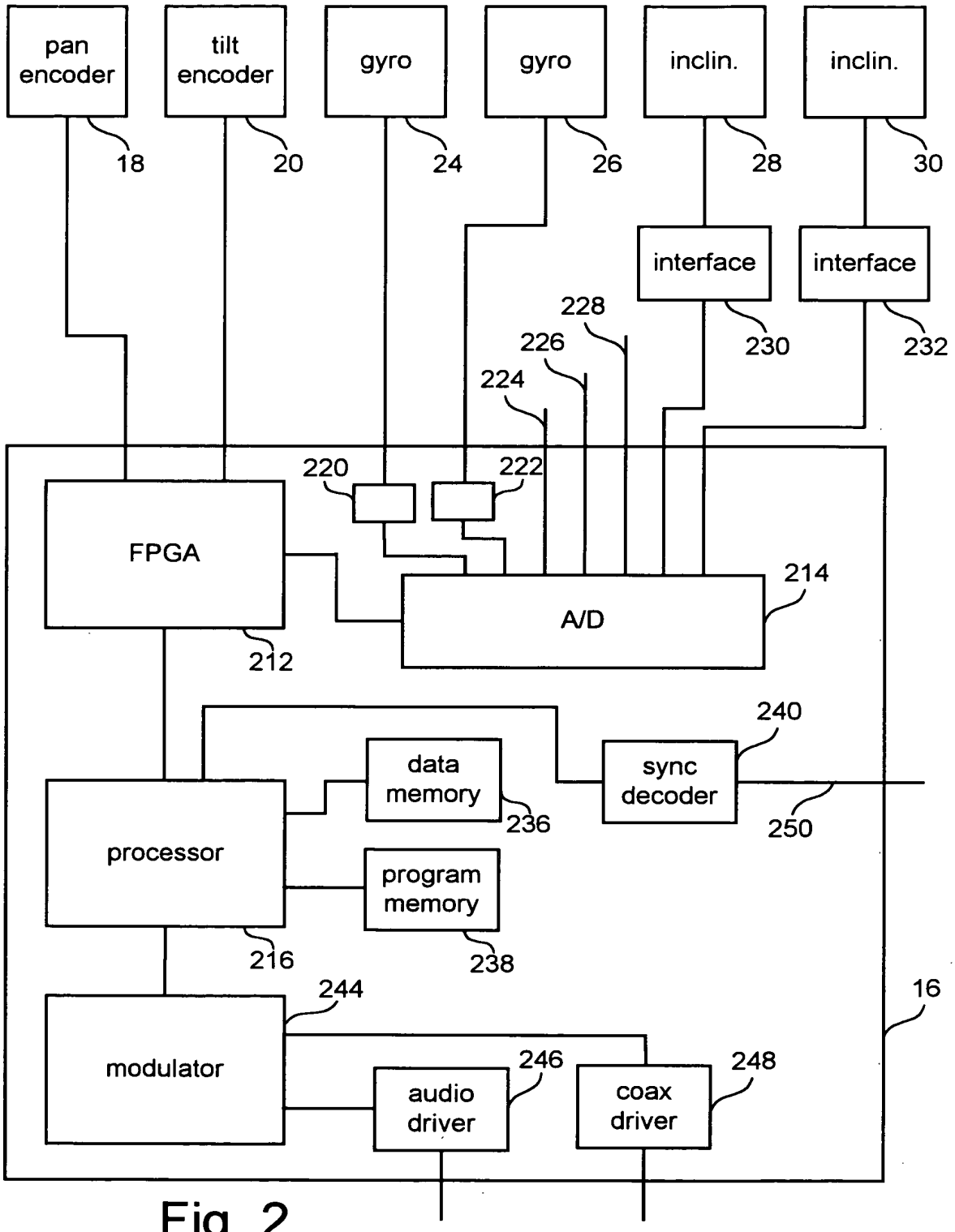
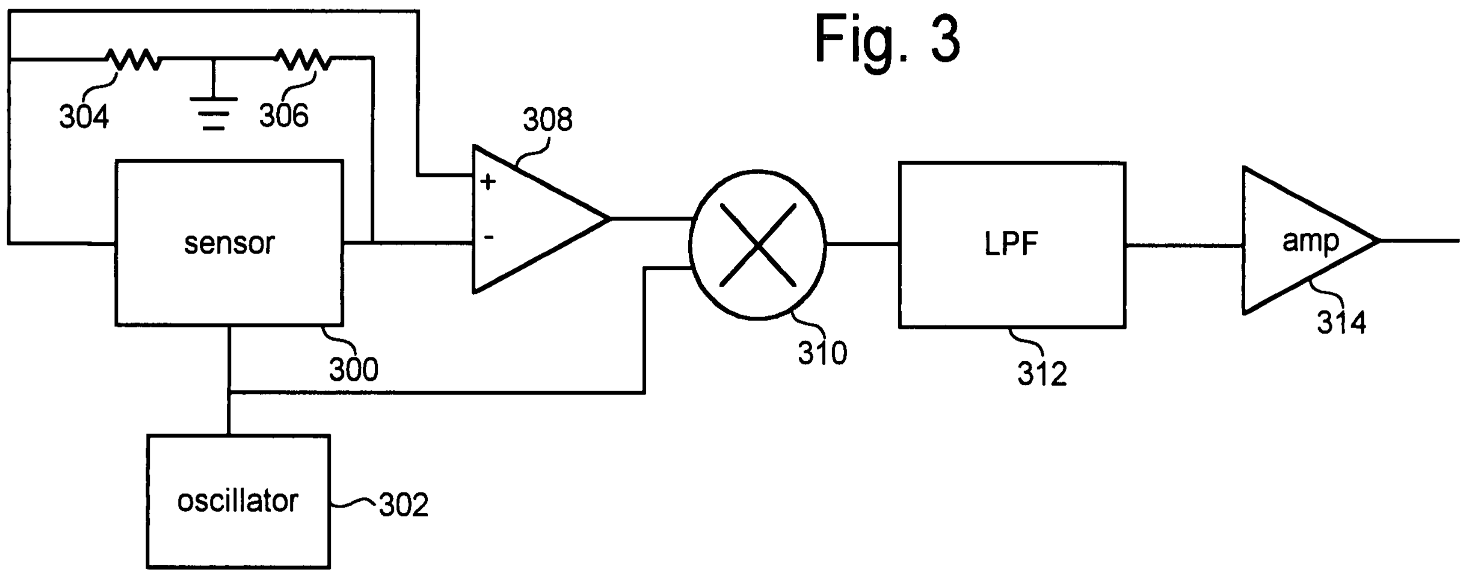

pan encoder
tilt encoder
gyro
gyro
inclin.
inclin.
18
20
24
26
28
30
interface
interface
228
226
224
230
232
220
222
FPGA
214
A/D
212
240
data memory
sync decoder
processor
236
250
program memory
216
238
244
16
modulator
246
248
audio driver
coax driver

Fig. 2

Fig. 3


304
306
308
sensor
300
oscillator
302
310
LPF
312
amp
314
+
-

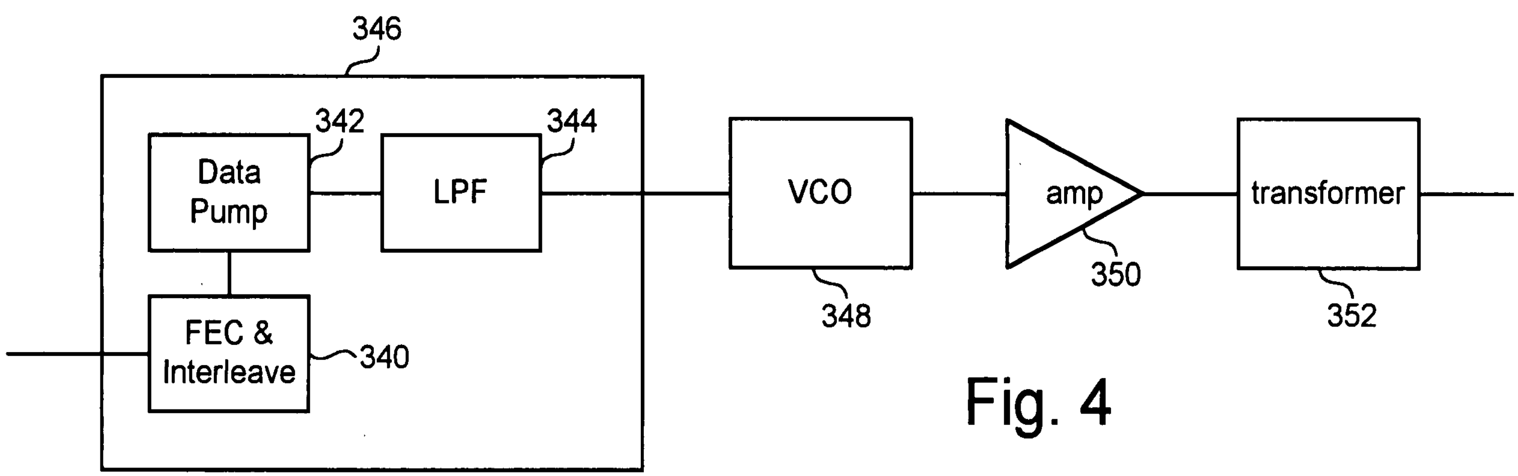

346
Data
Pump
342
LPF
344
FEC &
Interleave
340
VCO
348
amp
350
transformer
352

Fig. 4

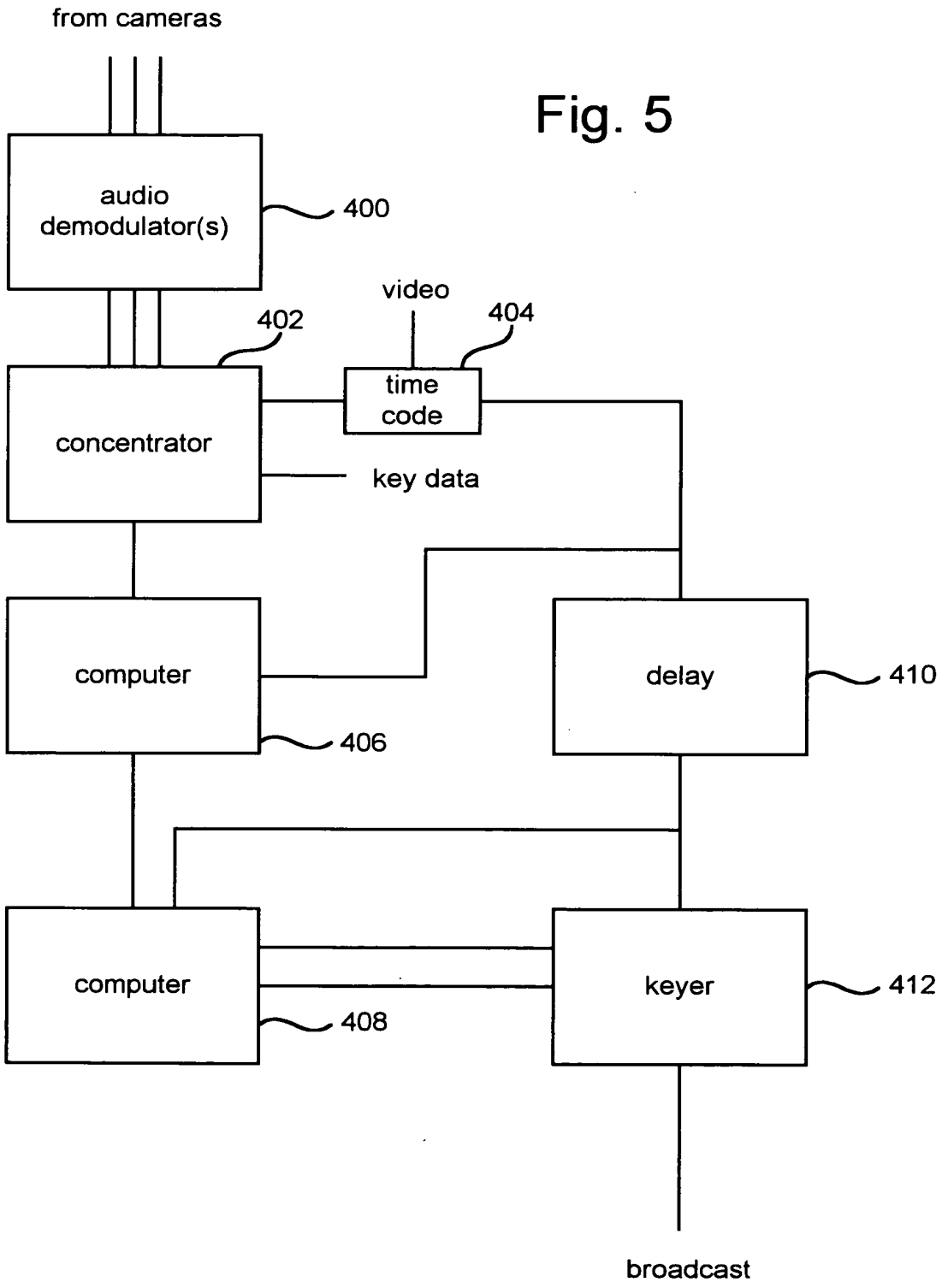

from cameras
audio demodulator(s)
400
video
402
404
time code
concentrator
key data
computer
406
delay
410
computer
408
keyer
412
broadcast

Fig. 5

Fig. 6

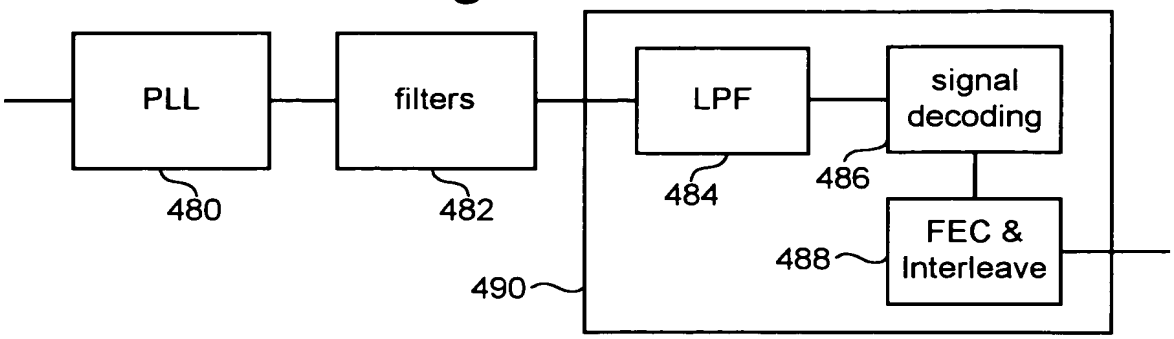


Fig. 7

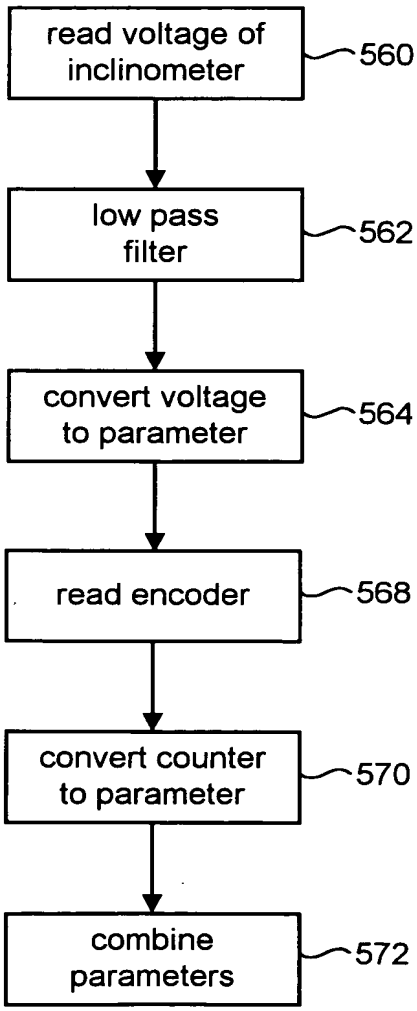


Fig. 11

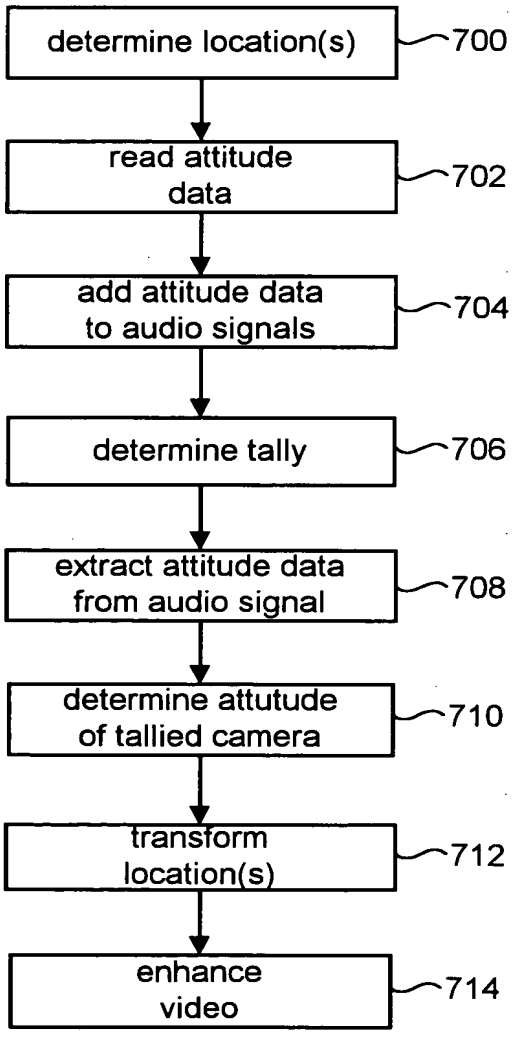


Fig. 8

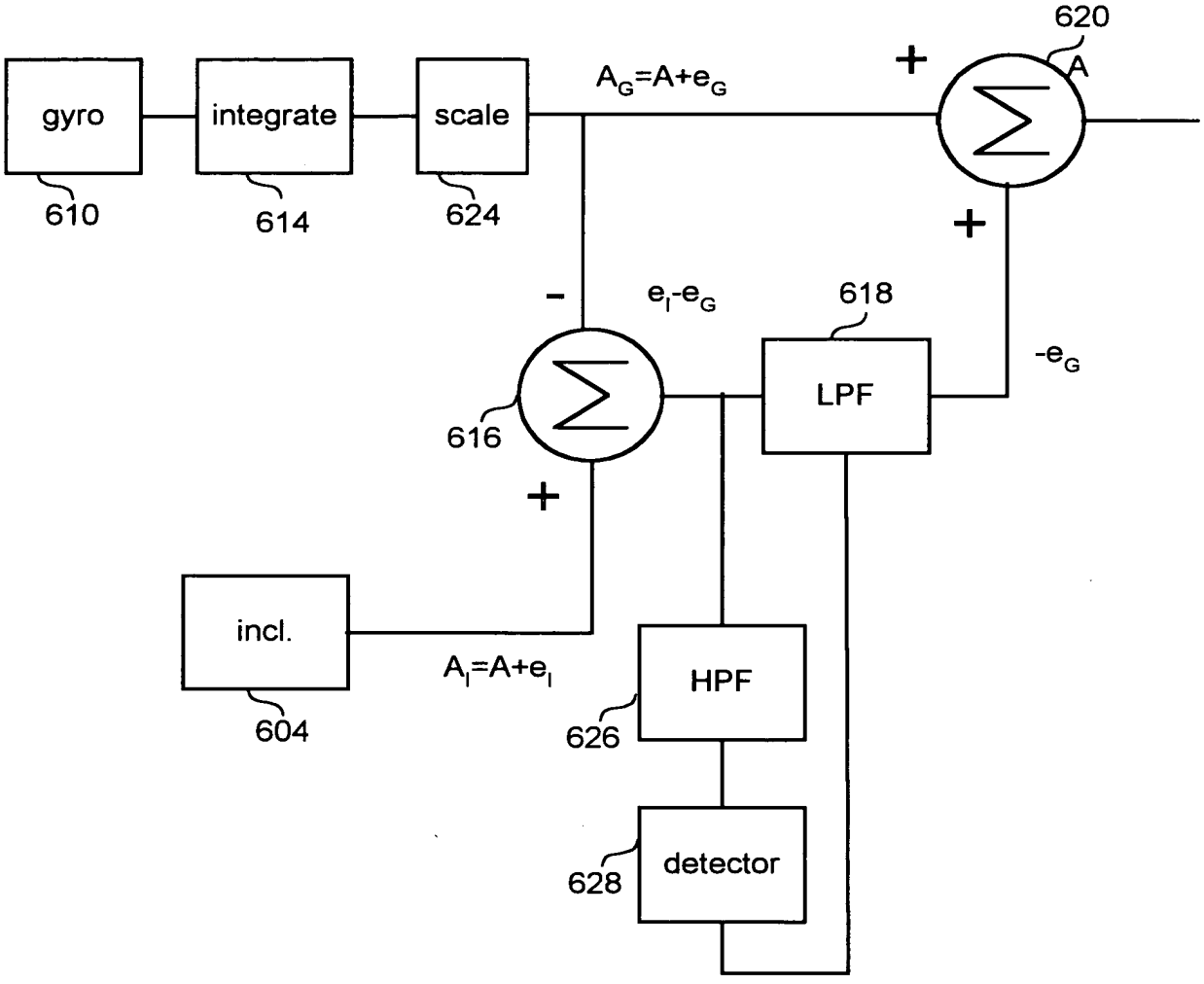

gyro
integrate
scale
610
614
624
$A_G=A+e_G$
620
A
+
+
-
e_I-e_G
618
LPF
$-e_G$
616
+
incl.
604
$A_I=A+e_I$
HPF
626
detector
628

Fig. 9

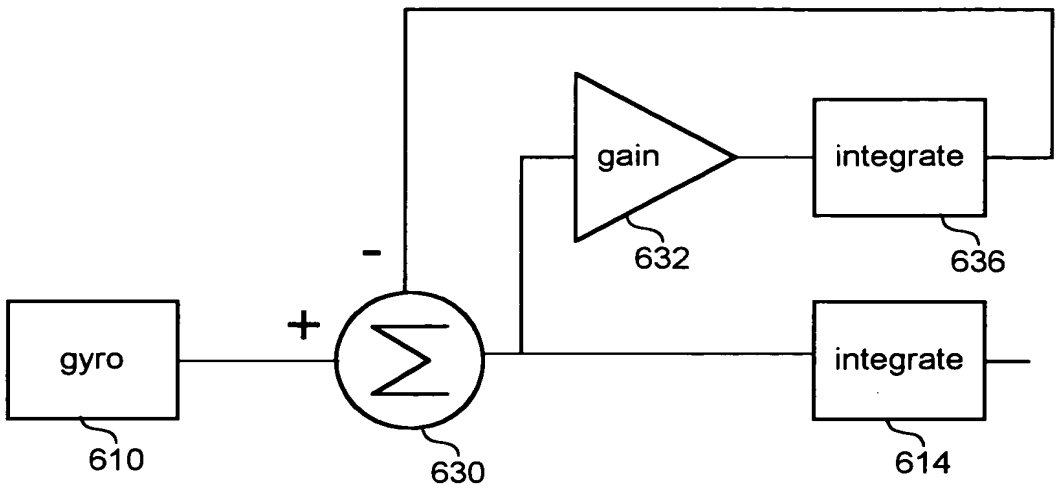
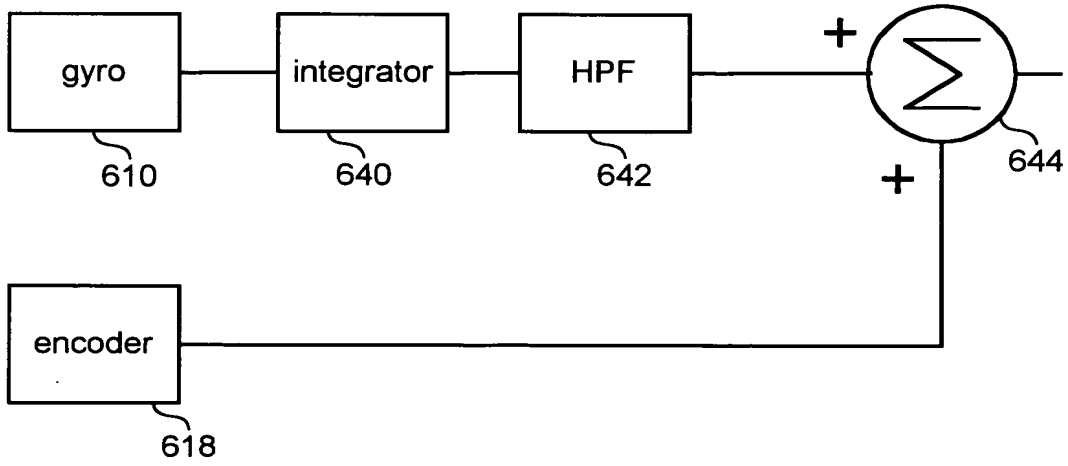

gain
integrate
632
636
-
+
gyro
integrate
610
630
614

Fig. 10


gyro
integrator
HPF
+
644
610
640
642
+
encoder
618